



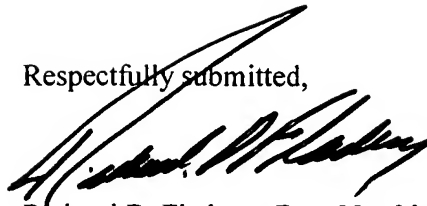
Name of Person Signing Certificate:

Signature _____

Signature

055010.0048 5403948 v1 WEST

Respectfully submitted,



Richard D. Fladung, Reg. No. 30,834
ATTORNEY OR AGENT OF RECORD

Date: March 19, 2004

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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/666,088
				Filing Date	September 19, 2003
				First Named Inventor	Don M. Hannegan
				Group Art Unit	3673
				Examiner Name	
Sheet	1	of	11	Attorney Docket Number	H055010.0048US0

U.S. PATENT DOCUMENTS				
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)		
	Des. 282,073		Bearden et al	01/1986
	517,509		Williams	04/1894
	1,157,644		London	10/1915
	1,472,952		Anderson	11/1923
	1,503,476		Childs et al	08/1924
	1,528,560		Myers et al	03/1925
	1,546,467		Bennett	07/1925
	1,560,763		Collins	11/1925
	1,700,894		Joyce et al	02/1929
	1,708,316		MacClatchie	04/1929
	1,769,921		Hansen	07/1930
	1,776,797		Sheldon	09/1930
	1,813,402		Hewitt	07/1931
	1,831,956		Harrington	11/1931
	1,836,470		Humason et al	12/1931
	1,902,906		Seamark	03/1933
	1,942,366		Seamark	01/1934
	2,036,537		Otis	04/1936
	2,071,197		Burns et al	02/1937
	2,124,015		Stone et al	07/1938
	2,126,007		Guiberson et al	08/1938
	2,144,682		MacClatchie	01/1939
	2,163,813		Stone et al	06/1939
	2,165,410		Penick et al	07/1939
	2,170,915		Schweitzer	08/1939
	2,170,916		Schweitzer et al	08/1939
	2,175,648		Roach	10/1939
	2,176,355		Otis	10/1939
	2,185,822		Young	01/1940
	2,199,735		Beckman	05/1940
	2,222,082		Leman et al	11/1940
	2,233,041		Alley	02/1941
	2,243,340		Hild	05/1941
	2,243,439		Pranger et al	05/1941
	2,287,205		Stone	06/1942
	2,303,090		Pranger et al	11/1942
	2,313,169		Penick et al	03/1943
	2,325,556		Taylor, Jr. et al	07/1943
	2,338,093		Caldwell	01/1944
	2,480,955		Penick	09/1949
	2,506,538		Bennett	05/1950

Examiner Signature		Date Considered	
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	Number	Kind Code (if known)		
	2,529,744		Schweitzer	11/1950
	2,609,836		Knox	09/1952
	2,628,852		Voytech	02/1953
	2,646,999		Barske	07/1953
	2,649,318		Skillman	08/1953
	2,731,281		Knox	01/1956
	2,746,781		Jones	05/1956
	2,760,750		Schweitzer, Jr. et al	08/1956
	2,760,795		Vertson	08/1956
	2,764,999		Stanbury	10/1956
	2,808,229		Bauer et al	10/1957
	2,808,230		McNeill et al	10/1957
	2,846,178		Minor	08/1958
	2,846,247		Davis	08/1958
	2,853,274		Collins	09/1958
	2,862,735		G.S. Knox	12/1958
	2,886,350		Horne	05/1959
	2,904,357		Knox	09/1959
	2,927,774		Ormsby	03/1960
	2,929,610		Stratton	03/1960
	2,995,196		Gibson et al	08/1961
	3,023,012		Wilde	02/1962
	3,029,083		Wilde	04/1962
	3,032,125		Hiser et al	05/1962
	3,033,011		Garrett	05/1962
	3,052,300		Hampton	09/1962
	3,100,015		Regan	08/1963
	3,128,614		Auer	04/1964
	3,134,613		Regan	05/1964
	3,176,996		Barnett	04/1965
	3,203,358		Regan et al	08/1965
	3,209,829		Haeber	10/1965
	3,216,731		Dollison	11/1965
	3,225,831		Knox	12/1965
	3,259,198		Montgomery, et al.	07/1966
	3,268,233		Brown	08/1966
	3,285,352		Hunter	11/1966
	3,288,472		Watkins	11/1966
	3,289,761		Smith et al	12/1966
	3,294,112		Watkins	12/1966
	3,313,345		Fischer	04/1967
	3,313,358		Postlewaite et al	04/1967
	3,323,773		Walker	06/1967

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	Number	Kind Code (if known)		
	3,333,870		Watkins	08/1967
	3,347,567		Watkins	10/1967
	3,360,048		Watkins	12/1967
	3,372,761		van Gils	03/1968
	3,387,851		Cugini	06/1968
	3,397,928		Galle	08/1968
	3,400,938		Williams	09/1968
	3,445,126		Watkins	05/1969
	3,452,815		Watkins	07/1969
	3,472,518		Harlan	10/1969
	3,476,195		Galle	11/1969
	3,485,051		Watkins	12/1969
	3,492,007		Jones	01/1970
	3,493,043		Watkins	02/1970
	3,529,835		Lewis	09/1970
	3,587,734		Shaffer	06/1971
	3,603,409		Watkins	09/1971
	3,621,912		Wooddy, Jr.	11/1971
	3,631,834		Gardner, et al.	01/1972
	3,638,721		Harrison	02/1972
	3,638,742		Wallace	02/1972
	3,653,350		Koons, et al.	04/1972
	3,661,409		Brown et al	05/1972
	3,664,376		Watkins	05/1972
	3,667,721		Vujasinovic	06/1972
	3,677,353		Baker	07/1972
	3,724,862		Biffle	04/1973
	3,779,313		Regan	12/1973
	3,815,673		Bruce, et al.	06/1974
	3,827,511		Jones	08/1974
	3,868,832		Biffle	03/1975
	3,934,887		Biffle	01/1976
	3,952,526		Watkins et al	04/1976
	3,955,622		Jones	05/1976
	3,965,987		Biffle	06/1976
	3,976,148		Maus et al	08/1976
	3,984,990		Jones	10/1976
	3,992,889		Watkins et al	11/1976
	3,999,766		Barton	12/1976
	4,037,890		Kurita et al	07/1977
	4,046,191		Neath	09/1977
	4,063,602		Howell, et al.	12/1977
	4,091,881		Maus	05/1978

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U.S. PATENT DOCUMENTS				
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)		
	4,098,341		Lewis	07/1978
	4,099,583		Maus	07/1978
	4,109,712		Regan	08/1978
	4,143,880		Bunting et al	03/1979
	4,143,881		Bunting	03/1979
	4,149,603		Arnold	04/1979
	4,154,448		Biffle	05/1979
	4,157,186		Murray et al	06/1979
	4,183,562		Watkins et al	01/1980
	4,200,312		Watkins	04/1980
	4,208,056		Biffle	06/1980
	4,222,590		Regan	09/1980
	4,281,724		Garrett	08/1981
	4,282,939		Maus et al	08/1981
	4,285,406		Garrett et al	08/1981
	4,291,772		Beynet	09/1981
	4,293,047		Young	10/1981
	4,304,310		Garrett	12/1981
	4,312,404		Morrow	01/1982
	4,326,584		Watkins	04/1982
	4,335,791		Evans	06/1982
	4,349,204		Malone	09/1982
	4,355,784		Cain	10/1982
	4,361,185		Biffle	11/1982
	4,363,357		Hunter	12/1982
	4,367,795		Biffle	01/1983
	4,378,849		Wilks	04/1983
	4,383,577		Pruitt	05/1983
	4,386,667		Millsapps, Jr.	06/1983
	4,398,599		Murray	08/1983
	4,406,333		Adams	09/1983
	4,407,375		Nakamura	08/1983
	4,413,653		Carter, Jr.	11/1983
	4,416,340		Bailey	11/1983
	4,423,776		Wagoner et al	01/1984
	4,424,861		Carter, Jr. et al.	01/1984
	4,441,551		Biffle	04/1984
	4,444,250		Keithahn et al.	04/1984
	4,444,401		Roche et al	04/1984
	4,448,255		Shaffer et al	05/1984
	4,456,062		Roche et al.	06/1984
	4,456,063		Roche	06/1984

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U.S. PATENT DOCUMENTS				
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)		
	4,480,703		Garrett	11/1984
	4,486,025		Johnston	12/1984
	4,500,094		Biffle	02/1985
	4,502,534		Roche et al	03/1985
	4,524,832		Roche et al	06/1985
	4,526,243		Young	07/1985
	4,527,632		Chaudot	07/1985
	4,529,210		Biffle	07/1985
	4,531,580		Jones	07/1985
	4,531,593		Elliott, et al.	07/1985
	4,546,828		Roche	10/1985
	4,553,591		Mitchell	11/1985
	4,566,494		Roche	01/1986
	4,595,343		Thompson, et al.	06/1986
	4,597,447		Roche et al	07/1986
	4,611,661		Hed, et al.	09/1986
	4,618,314		Hailey	10/1986
	4,621,655		Roche	11/1986
	4,626,135		Roche	12/1986
	4,632,188		Schuh, et al.	12/1986
	4,646,844		Roche et al	03/1987
	4,697,484		Klee et al	10/1987
	4,712,620		Lim, et al.	12/1987
	4,719,937		Roche et al	01/1988
	4,727,942		Galle, et al.	03/1988
	4,745,970		Bearden et al	05/1988
	4,749,035		Cassity	06/1988
	4,754,820		Watts et al	07/1988
	4,783,084		Biffle	11/1988
	4,813,495		Leach	03/1989
	4,817,724		Funderburg, Jr., et al.	04/1989
	4,825,938		Davis	05/1989
	4,828,024		Roche	05/1989
	4,832,126		Roche	05/1989
	4,836,289		Young	06/1989
	4,909,327		Roche	03/1990
	4,949,796		Williams	08/1990
	4,955,436		Johnston	09/1990
	4,971,148		Roche et al.	11/1990
	5,022,472		Bailey et al	06/1991
	5,028,056		Bemis et al	07/1991
	5,072,795		Delgado, et al.	12/1991
	5,085,277		Hopper	02/1992

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U.S. PATENT DOCUMENTS				
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)		
	5,137,084		Gonzales et al	08/1992
	5,178,215		Yenulis et al	01/1993
	5,184,686		Gonzalez	02/1993
	5,213,158		Bailey et al	05/1993
	5,215,151		Smith et al.	06/1993
	5,224,557		Yenulis et al	07/1993
	5,277,249		Yenulis et al	01/1994
	5,279,365		Yenulis et al	01/1994
	5,320,325		Young, et al.	06/1994
	5,322,137		Gonzales	06/1994
	5,647,444		Williams	07/1997
	5,662,181		Williams et al.	09/1997
	5,848,643		Carbaugh et al.	12/1998
	5,901,964		Williams, et al.	05/1999
	6,102,673		Mott, et al.	08/2000
	6,138,774		Bourgoyne, et al.	10/2000
	6,213,228	B1	Saxman	04/2001
	6,230,824	B1	Peterman et al.	05/2001
	6,244,359	B1	Bridges, et al.	06/2001
	6,263,982	B1	Hannegan, et al.	07/2001
	6,325,159	B1	Peterman, et al.	12/2001
	6,450,262	B1	Regan	09/2002
	6,470,975	B1	Bourgoyne, et al.	10/2002
	20010040052	A1	Bourgoyne, et al.	11/2001
	20030106712	A1	Bourgoyne, et al.	06/2003

FOREIGN PATENT DOCUMENTS						
Exr Initials	Foreign Patent Document			Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY	T ₁
	Country Code	Number	Kind Code (if known)			
	GB	2,067,235	A	Diehl	07/1981	
	EP	267,140	B1	Galle, et al.	03/1993	
	PCT	WO 99/50524	A2	Mott, et al.	10/1999	
	PCT	WO 99/50524	A3	Mott, et.al.	12/1999	
	PCT	WO 99/51852	A1	Bridges, et al.	10/1999	

U.S. PATENT RELATED APPLICATIONS				
Exr Initials	APPLICATION NO.	ATTY. DOCKET NO.	Status or Patentee	Date of Filing or Issue
	60/079,641	09432/160001	Abandoned, but Priority Claimed in above U.S. Patent Nos. 6,230,824B1 and 6,102,673 and PCT WO 99/50524	March 27, 1998

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Exr Initials		Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
	A	The Modular T BOP Stack System, Cameron Iron Works © 1985 (5 pages)	
	B	Cameron HC Collet Connector, ©1996 Cooper Cameron Corporation, Cameron Division (12 pages)	
	C	Riserless drilling: circumventing the size/cost cycle in deepwater - Conoco, Hydril project seek enabling technologies to drill in deepest water depths economically, May 1996 Offshore Drilling Technology (pages 49, 50, 52, 53, 54 and 55)	
	D	Williams Tool Company - Home Page - Under Construction Williams Rotating Control Heads (2 pages); Seal-Ability for the pressures of drilling (2 pages); Williams Model 7000 Series Rotating Control Heads (1 page); Williams Model 7000 & 7100 Series Rotating Control Heads (2 pages); Williams Model IP1000 Rotating Control Head (2 pages); Williams Conventional Models 8000 & 9000 (2 pages); Applications Where using a Williams rotating control head while drilling is a plus (1 page); Williams <u>higher pressure</u> rotating control head systems are IDEALLY SUITED FOR NEW TECHNOLOGY FLOW DRILLING AND CLOSED LOOP UNDERBALANCED DRILLING (UBD) VERTICAL AND HORIZONTAL (2 pages); and How to Contact Us (2 pages)	
	E	Offshore - World Trends and Technology for Offshore Oil and Gas Operations, March 1998, Seismic: Article entitled, "Shallow Flow Diverter JIP Spurred by Deepwater Washouts" (3 pages including cover page, table of contents and page 90)	
	F	Williams Tool Co., Inc. Rotating Control Heads and Strippers for Air, Gas, Mud, and Geothermal Drilling Worldwide - Sales Rental Service, ©1988 (19 pages)	
	G	Williams Tool Co., Inc. 19 page brochure ©1991 Williams Tool Co., Inc. (19 pages)	
	H	Fig. 14. Floating Piston Drilling Choke Design; May of 1997	
	I	Blowout Preventer Testing for Underbalanced Drilling by Charles R. "Rick" Stone and Larry A. Cress, Signa Engineering Corp., Houston, Texas, 24 pages, (Undated)	
	J	Williams Tool Co., Inc. Instructions, Assemble & Disassemble Model 9000 Bearing Assembly (cover page and 27 numbered pages)	
	K	Williams Tool Co., Inc. Rotating Control Heads Making Drilling Safer While Reducing Costs Since 1968, ©1989 (4 pages)	
	L	Williams Tool Company, Inc. International Model 7000 Rotating Control Head, © 1991 (4 pages).	
	M	Williams Rotating Control Heads, Reduce Costs Increase Safety Reduce Environmental Impact, 4 pages, (© 1995)	
	N	Williams Tool Co., Inc., Sales-Rental-Service, Williams Rotating Control Heads and Strippers for Air, Gas, Mud, and Geothermal Drilling, © 1982 (7 pages)	
	O	Williams Tool Co., Inc., Rotating Control Heads and Strippers for Air, Gas, Mud, Geothermal and Pressure Drilling, © 1991 (19 pages)	
	P	An article - The Brief January '96, The Brief's Guest Columnists, Williams Tool Co., Inc., Communicating December 13, 1995 (Fort Smith, Arkansas) The <i>When?</i> and <i>Why?</i> of Rotating Control Head Usage, Copyright © Murphy Publishing, Inc. 1996 (2 pages)	
	Q	A reprint from the October 9, 1995 edition of Oil & Gas Journal, "Rotating control head applications increasing", by Adam T. Bourgoynne, Jr., Copyright 1995 by PennWell Publishing Company (4 pages)	
	R	1966-1967 Composite Catalog-Grant Rotating Drilling Head for Air, Gas or Mud Drilling, (1 page)	
	S	1976-1977 Composite Catalog Grant Oil Tool Company Rotating Drilling Head Models 7068, 7368, 8068 (Patented), Equally Effective with Air, Gas, or Mud Circulation Media (3 pages)	

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	T	A Subsea Rotating Control Head for Riserless Drilling Applications; Darryl A. Bourgoyne, Adam T. Bourgoyne, and Don Hannegan - 1998 International Association of Drilling Contractors International Deep Water Well Control Conference held in Houston, Texas, August 26-27, 1998, 14 pages.		
	U	Hannegan, "Applications Widening for Rotating Control Heads," Drilling Contractor, cover page, table of contents and pages 17 and 19, Drilling Contractor Publications Inc., Houston, Texas, July 1996.		
	V	Composite Catalog, Hughes Offshore 1986-87 Subsea Systems and Equipment, Hughes Drilling Equipment Composite Catalog, two cover sheets and pages 2988-3004.		
	W	Williams Tool Co., Inc., Technical Specifications Model for The Model 7100, 3 pages.		
	X	Williams Tool Co., Inc. Website, Underbalanced Drilling (UBD), The Attraction of UBD 2 pages.		
	Y	Williams Tool Co., Inc. Website, "Applications, Where Using a Williams Rotating Control Head While Drilling is a Plus," 2 pages.		
	Z1	Williams Tool Co., Inc. Website, "Model 7100," 3 pages.		
	Z2	Composite Catalog, Hughes Offshore 1982/1983, Regan Products, © Copyright 1982, Two cover sheets and 4308-27 thru 4308-43, and end sheet		
	Z3	Coflexip Brochure; 1-Coflexip Sales Offices, 2-The Flexible Steel Pipe for Drilling and Service Applications, 3-New 5" I.D. General Drilling Flexible, 4-Applications, and 5-Illustration, 5 unnumbered pages.		
	AA	Baker, Ron, "A Primer of Oilwell Drilling", Fourth Edition, Published by Petroleum Extension Service, The University of Texas at Austin, Austin, Texas, in cooperation with International Association of Drilling Contractors Houston Texas © 1979, 3 cover pages and pages 42-49 re Circulation System.		
	BB	Brochure, Lock down Lubricator System, Dutch Enterprises Inc., "Safety with Savings," pages D-3 through D-18, See above U.S. Patent No. 4,836,289 referred to therein.		
	CC	Hydril GL series Annular Blowout Preventers (Patented - see Roche patents above), 2pages, (© 1998)		
	DD	Other Hydril Product Information (The GH Gas Handler Series Product is Listed), © 1996, Hydril Company, pages D-29 through D-47.		
	EE	Brochure, Shaffer Type 79 Rotating Blowout Preventer, NL Rig Equipment/NL Industries, Inc., pages D-49 thru D-54.		
	FF	Shaffer, A Varco Company, Cover page and pages 1562-1568.		
	GG	Avoiding Explosive Unloading of Gas in a Deep Water Riser When SOBMs are in Use; Colin P. Leach & Joseph R. Roche; (The Paper Describes an Application for the Hydril Gas Handler, The Hydril GH 211-2000 Gas Handler is Depicted in Figure 1 of the Paper), 9 unnumbered pages, (Undated)		
	HH	Feasibility Study of Dual Density Mud System for Deepwater Drilling Operations; Clovis A. Lopes & A.T. Bourgoyne Jr.; Offshore Technology Conference Paper Number 8465, pages 257-266, (© 1997)		

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				Application Number	10/666,088
				Filing Date	September 19, 2003
				First Named Inventor,	Don M. Hannegan
				Group Art Unit	3673
				Examiner Name	
Sheet	9	of	11	Attorney Docket Number	H055010.0048US0

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Exr Initials		Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁	
	II	April 1998 Offshore Drilling with Light Weight Fluids Joint Industry Project Presentation, pages C-3 thru C-11.		
	JJ	Nakagawa, Edson Y., Santos, Helio and Cunha, J.C., "Application of Aerated-Fluid Drilling in Deepwater", SPE/IADC 52787 Presented by Don Hannegan, P.E., SPE ©1999 SPE/IADC Drilling Conference, Amsterdam, Holland, 5 unnumbered pages, (March 9-11, 1999)		
	KK	Brochure: "Inter-Tech Drilling Solutions Ltd.'s RBOP™ Means Safety and Experience for Underbalanced Drilling", Inter-Tech Drilling Solutions Ltd./Big D Rentals & Sales (1981) Ltd., "Rotating BOP," 2 unnumbered pages.		
	LL	"Pressure Control While Drilling", Shaffer® A Varco Company, Rev. A, 2 unnumbered pages.		
	MM	"Field Exposure (As of August 1998), Shaffer® A Varco Company, 1 unnumbered page.		
	NN	Graphic: "Rotating Spherical BOP," 1 unnumbered page.		
	OO	"JIP's Work Brightens Outlook for UBD in Deep Waters" by Edson Yoshihito Nakagawa Helio Santos and Jose Carlos Cunha American Oil & Gas Reporter, pp. 52-53 56, 58-60, and 62-63, (April 1999)		
	PP	"Seal-Tech 1500 PSI Rotating Blowout Preventer", 3 unnumbered pages, (Undated)		
	QQ	"RPM System 3000™ Rotating Blowout Preventer, Setting a new standard in Well Control", by Techcorp Industries, 4 unnumbered pages, (Undated)		
	RR	"RiserCap™ Materials Presented at the 1999 LSU/MMS/IADC Well Control Workshop", by Williams Tool Company, Inc., pp. 1-14, (March 24-25, 1999)		
	SS	"The 1999 LSU/MMS Well Control Workshop: An overview," by JOHN ROGERS SMITH, World Oil, Cover page and pp. 4, 41-42, and 44-45, (June 1999)		
	TT	DAG OLUF NESSA, "Offshore underbalanced drilling system could revive field developments," World Oil, Vol. 218, No. 10, Color Copies of Cover Page and pp. 3, 83-84, 86, and 88, (October 1997)		
	UU	D. O. NESSA, "Offshore underbalanced drilling system could revive field developments", World Oil Exploration Drilling Production, Volume 218 No. 7, Color copies of Cover Page and pp. 3, 61-64, and 66, (July 1997)		
	VV	PCT Search Report, International Application No. PCT/US99/06695, 4 pages, (Date of Completion May 27, 1999)		
	WW	PCT Search Report, International Application No. PCT/GB00/00731, 3 pages, (Date of Completion June 16, 2000)		
	XX	National Academy of Sciences—National Research Council, "Design of a Deep Ocean Drilling Ship", Cover Page and pp. 114-121, Undated but cited in above U.S. Patent No. 6,230,824B1		
	YY	"History and Development of a Rotating Blowout Preventer," by A. CRESS, CLAYTON W. WILLIAMS, RICK STONE, and MIKE TANGEDAHL, IADC/SPE 23931, 1992 IADC/SPE Drilling Conference, pp. 757-773, (February 1992).		
	ZZ 1	REHM, BILL, "Practical Underbalanced Drilling and Workover," PETROLEUM EXTENSION SERVICE, THE UNIVERSITY OF TEXAS AT AUSTIN CONTINUING & EXTENDED EDUCATION, Cover page, title page, copyright page, and pp. 6-6, 11-2, 11-3, G-9, and G-10, (2002)		
	AAA	WILLIAMS TOOL COMPANY INC., "RISERCAP™: Rotating Control Head System For Floating Drilling Rig Applications", 4 unnumbered pages, (©1999 Williams Tool Company, Inc.), see reference to above U.S. Patent No. 5,662,181		

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	BBB	ANTONIO C.V.M. LAGE, HELIO SANTOS and PAULO R.C. SILVA, <i>Drilling With Aerated Drilling Fluid From a Floating Unit Part 2: Drilling the Well</i> , SPE 71361, 11 pages, (©2001, Society of Petroleum Engineers Inc.)		
	CCC	HELIO SANTOS, FABIO ROSA, and CHRISTIAN LEUCHTENBERG, <i>Drilling with Aerated Fluid from a Floating Unit, Part 1: Planning, Equipment, Tests, and Rig Modifications</i> , SPE/IADC 67748, 8 pages, (©2001 SPE/IADC Drilling Conference)		
	DDD	E. Y. NAKAGAWA, H. SANTOS, J. C. CUNHA and S. SHAYEGI, <i>Planning of Deepwater Drilling Operations with Aerated Fluids</i> , SPE 54283, 7 pages, (©1999, Society of Petroleum Engineers Inc.)		
	EEE	E. Y. NAKAGAWA, H.M.R. SANTOS and J.C. CUNHA, <i>Implementing the Light-Weight Fluids Drilling Technology in Deepwater Scenarios</i> , 1999 LSU/MMS Well Control Workshop March 24-25, 1999, 12 pages, paper and powerpoint presentation, (1999)		
	FFF 1	Press Release: "Stewart & Stevenson Introduces First Dual Gradient Riser," Stewart & Stevenson, http://www.ssss.com/ssss/20000831.asp , 2 pages (8/31/2000)		
	GGG	WILLIAMS TOOL COMPANY INC., "Williams Tool Company Introduces the... Virtual Riser™," 4 unnumbered pages, (©1998 Williams Tool Company, Inc.)		
	HHH	"PETEX Publications." Petroleum Extension Service, University of Texas at Austin, 12 pages, (last modified December 6, 2002)		
	III	"BG in the Caspian region," SPE REVIEW, Issue 164, 3 unnumbered pages, (May, 2003)		
	JJJ	"Field Cases as of 3 March 2003," Impact Fluid Solutions, 6 pages, (3/3/2003.)		
	KKK	"Determine the Safe Application of Underbalanced Drilling Techniques in Marine Environments - Technical Proposal," Maurer Technology, Inc., Cover Page and pp. 2-13, (6/17/2002.)		
	LLL	COLBERT, JOHN W, "John W. Colbert, P.E. Vice President Engineering Biographical Data," Signa Engineering Corp., 2 unnumbered pages, (undated)		
	MMM	"Technical Training Courses," Parker Drilling Co., http://www.parkerdrilling.com/news/tech.html , 5 pages, (last visited, 9/5/2003)		
	NNN	"Drilling equipment: Improvements from data recording to slim hole," Drilling Contractor, pp. 30-32, (March/April 2000)		
	OOO	"Drilling conference promises to be informative," Drilling Contractor, p. 10, (January/February 2002)		
	PPP	"Underbalanced and Air Drilling," OGCI, Inc., http://www.ogci.com/course_info.asp?courseID=410 , 2 pages, (2003)		
	QQQ	"2003 SPE Calendar," Society of Petroleum Engineers, Google cache of http://www.spe.org/spe/cda/views/events/eventMaster/0,1470,1648_2194_632303,00.html ; for "mud cap drilling," 2 pages, (2001)		
	RRR	"Oilfield Glossary: reverse-circulating valve," Schlumberger Limited, 1 page (2003)		
	SSS	MURPHY, ROSS D. and THOMPSON, PAUL B., "A drilling contractor's view of underbalanced drilling," World Oil Magazine, Vol. 223, No. 5, 9 pages, (May 2002)		
	TTT	"Weatherford UnderBalanced Services: General Underbalance Presentation to the DTI," 71 unnumbered pages, © 2002		
	UUU	RACH, NINA M., "Underbalanced, near-balanced drilling are possible offshore," Oil & Gas Journal, Color Copies, pp. 39-44, (December 1, 2003)		

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	VVV	FORREST, NEIL; BAILEY, TOM; HANNEGAN, DON; "Subsea Equipment for Deep Water Drilling Using Dual Gradient Mud System," SPE/IADC 67707, pp.1-8, (© 2001, SPE/IADC Drilling Conference)		
	WWW	HANNEGAN, D.M.; BOURGOYNE JR., A.T.; "Deepwater Drilling with Lightweight Fluids - Essential Equipment Required," SPE/IADC 67708, pp. 1-6, (© 2001, SPE/IADC Drilling Conference)		
	XXX	HANNEGAN, DON M., "Underbalanced Operations Continue Offshore Movement," SPE 68491, pp. 1-3, (© 2001, Society of Petroleum Engineers, Inc.)		
	YYY	HANNEGAN, D. and DIVINE, R., "Underbalanced Drilling - Perceptions and Realities of Today's Technology in Offshore Applications," IADC/SPE 74448, pp.1-9, (© 2002, IADC/SPE Drilling Conference)		
	ZZZ	HANNEGAN, DON M. and WANZER, GLEN; "Well Control Considerations - Offshore Applications of Underbalanced Drilling Technology," SPE/IADC 79854, pp.1-14, (© 2003, SPE/IADC Drilling Conference)		
	AAAA	BYBEE, KAREN, "Offshore Applications of Underbalanced-Drilling Technology," Journal of Petroleum Technology, Cover Page and pp. 51-52, (January 2004)		
	BBBB	BOURGOYNE, DARRYL A.; BOURGOYNE, ADAM T.; HANNEGAN, DON; "A Subsea Rotating Control Head for Riserless Drilling Applications," IADC International Deep Water Well Control Conference, pp. 1-14, (August 26-27, 1998)		
	CCCC	LAGE, ANTONIO C.V.M; SANTOS, HELIO; SILVA, PAULO R.C.; "Drilling With Aerated Drilling Fluid From a Floating Unit Part 2: Drilling the Well," Society of Petroleum Engineers, SPE 71361, pp.1-11, (September 30 - October 3, 2001) (see document BBB)		
	DDDD	FURLOW, WILLIAM; "Shell's seafloor pump, solids removal key to ultra-deep, dual-gradient drilling (Skid ready for commercialization)," Offshore World Trends and Technology for Offshore Oil and Gas Operations, Cover page, table of contents, pp.54, 2 unnumbered pages, and 106, (June 2001)		
	EEEE	ROWDEN, MICHAEL V.; "Advances in riserless drilling pushing the deepwater surface string envelope (Alternative to seawater, CaCl ₂ sweeps)," Offshore World Trends and Technology for Offshore Oil and Gas Operations, Cover page, table of contents, pp.56, 58, and 106, (June 2001)		
	FFFF	BOYLE, JOHN; "Multi Purpose Intervention Vessel Presentation," M.O.S.T. Multi Operational Service Tankers, Weatherford International, January 2004, 43 pages, (© 2003)		

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